

What is claimed is:

1. A cell ID code generating method in a radio communication system comprising:

5 receiving candidate codes of a cell ID code from a control center;
selecting one candidate code on the basis of power of a common pilot channel (CPICH) of each cell; and
puncturing the selected candidate code to generate a primary cell ID code.

10 2. The method of claim 1, wherein the control center is a radio network controller (RNC).

3. The method of claim 1, wherein the candidate code is a temporary cell ID code.

15 4. The method of claim 1, wherein the temporary cell ID code is 8 Hadamard codes with a 16-bit length.

5. The method of claim 1, wherein the puncturing is performed in
20 such a manner that the Hamming distance is not reduced.

6. The method of claim 5, wherein, two '0' bits are punctured in the candidate code.

25 7. The method of claim 1, wherein the two zero bits are the first and

the ninth bits of the 16-bit candidate code.

8. The method of claim 7, wherein the two zero bits are the first and the ninth bits of the 16-bit candidate code.

5

9. The method of claim 1 further comprising:
checking whether the temporary cell ID codes are long;
checking whether link feedback information (FBI) bits are 2 bits, if the temporary cell ID codes are long,

10 puncturing the temporary cell ID codes if the FBI bits are 2 bits.

10. The method of claim 1, wherein the generating step comprises:
generating the temporary cell ID codes as the first long code of 16 bits; and
puncturing the first and ninth bits of the temporary cell ID codes to generate
15 a second long code of 14 bits.

11. The method of claim 1 further comprising:
transferring the generated primary cell ID code to cells through an uplink FBI field.

20

12. A cell ID code generating method in a radio system in which a primary cell is recognized by receiving a primary cell ID code from a terminal (UE), comprising:

receiving a temporary cell ID code from a radio network; and
25 puncturing a specific bit of the temporary cell ID code in a manner that a

minimum Hamming distance is not reduced, to generate a primary cell ID code.

13. The method of claim 12, wherein the temporary cell ID code is 8 Hadamard codes.

5

14. The method of claim 12, wherein the specific bit is the first and ninth bits of the Hadamard codes with the 16-bit length.

15. A cell ID code generating method in a wireless system in which a temporary cell ID code is received from a network, and an identification code of a primary cell is generated and transmitted to a cell, comprising:

generating Hadamard codes; and

puncturing specific bits of the Hadamard codes in such a manner that a minimum Hamming distance is not reduced, to generate a temporary cell ID code.

15

16. The method of claim 15, wherein the temporary cell ID code is 8 Hadamard codes.

17. The method of claim 15, wherein the specific bit is the first and ninth bits of the Hadamard codes with the 16-bit length.

20

18. A cell ID code generating method in a wireless system in which a primary cell is recognized by receiving a primary cell ID code from a terminal (UE), comprising:

25 receiving a temporary cell ID code from a network;

measuring power of each common pilot channel (CPICH);
selecting one temporary cell ID code assigned to a cell with the strongest
CPICH power among temporary cell ID codes;
puncturing the selected temporary cell ID code to generate a primary cell ID
5 code; and
transferring the primary cell ID code to a cell through an uplink FBI field.

19. The method of claim 18, wherein the temporary cell ID code is 8
Hadamard codes of 16-bit length.

10 20. The method of claim 18, wherein the puncturing is performed in
such a manner that a Hamming distance is not reduced.

21. The method of claim 20, wherein two '0' bits are punctured in the
15 temporary cell ID code.

22. The method of claim 20, wherein the two zero bits are the first and
the ninth bits of the temporary cell ID code.

20 23. The method of claim 18 further comprising:
checking whether the temporary cell ID code is long;
checking whether link feedback information (FBI) bits are 2 bits, if the
temporary cell ID code is long,
puncturing the temporary cell ID code if the FBI bits are 2 bits.

25 24. The method of claim 18, wherein the transmitting step comprises:

assigning the temporary cell ID code as a first long code for the FBI field;
and
puncturing the first and ninth bits of the temporary cell ID code and
assigning a second long code for the FBI field.

5

25. A cell ID code generating method in a wireless system in which
temporary cell ID codes are received from a network, and a primary cell ID code
for a cell identification is transmitted, comprising:

puncturing temporary cell ID codes;
10 transferring the punctured temporary cell ID codes;
measuring power of common pilot channels (CPICH) of each cell;
selecting a temporary cell ID code assigned to a cell with the strongest
CPICH power among the received temporary cell ID codes as a primary cell ID
code; and
15 transmitting the selected primary cell ID code to a cell through an uplink FBI
field.

26. The method of claim 25, wherein the temporary cell ID code is 8
Hadamard codes of 16-bit length.

20

27. The method of claim 25, wherein the puncturing is performed in
such a manner that a Hamming distance is not reduced.

28. The method of claim 25, wherein two '0' bits are punctured in the
25 temporary cell ID code.

29. The method of claim 28, wherein the two zero bits are the first and the ninth bits of the temporary cell ID code.

5 30. The method of claim 25 further comprising:
checking whether the punctured temporary cell ID codes are long;
checking whether link feedback information (FBI) bits are 2 bits, if the
punctured temporary cell ID codes are long,
recognizing a cell with the strongest CPICH power if the FBI bits are 2 bits.

10 31. A cell ID code generating method in a wireless system in which a
terminal receives temporary cell ID codes of each cell from a network and
transfers a primary cell ID code to an active cell,
wherein the temporary cell ID code and the primary cell ID code are
15 transmitted and received by index.

32. The method of claim 31, wherein the terminal and cells include a
temporary cell ID code table.

20 33. The method of claim 31, wherein the temporary cell ID code is a
punctured Hadamard code.

34. The method of claim 33, wherein the punctured Hadamard code is
a 16-bit Hadamard code with first and ninth bits punctured.

25 35. The method of claim 31, wherein the network transfers an index

corresponding to a temporary cell ID code of each cell to each cell and the terminal.

36. The method of claim 31, wherein the terminal transfers an index of
5 a temporary cell ID code corresponding to a primary cell ID code to every terminal.

37. A cell ID code identifying method in a wireless system in which a primary cell ID code is received from a terminal and a primary cell is identified, comprising:

10 assigning a temporary cell ID code of each cell by a network;
transmitting, in each cell, the allocated temporary cell ID code to a terminal;
receiving a primary cell ID code from the terminal; and
identifying a primary cell by comparing the primary cell ID code with its temporary cell ID code.

15

38. The method of claim 37, wherein the temporary cell ID code and the primary cell ID code are transmitted and received by index.

39. The method of claim 37, wherein Preferably, the terminal and the
20 cells include a temporary cell ID code table.

40. The method of claim 37, wherein the temporary cell ID code is a punctured Hadamard code.

25 41. The method of claim 40, wherein the punctured Hadamard code is

a 16-bit Hadamard code with first and ninth bits punctured.

42. A cell ID code generating method in a wireless system in which a terminal receives temporary cell ID codes of each cell from a network and transfers a primary cell ID code to an active cell, comprising:

5 receiving temporary cell ID codes of each cell;

measuring power of a common pilot channel (CPICH) of each cell; and

selecting a temporary cell ID code with the strongest CPICH power as a primary cell ID code and transferring it to every cell.

10

43. The method of claim 42, wherein the terminal and each cell include a temporary cell ID code table.

44. The method of claim 42, wherein the temporary cell ID code and the primary cell ID code are transmitted and received by index.

15

45. The method of claim 42, wherein the terminal transfers the primary cell ID code to every cell.

20 46. The method of claim 42, wherein the temporary cell ID code is a punctured Hadamard code.

47. The method of claim 46, wherein the punctured Hadamard code is a 16-bit Hadamard code with first and ninth bits punctured.